

**6<sup>th</sup> Semester**  
**AGRICULTURE TECHNOLOGY**  
**(COMMERCIAL MUSHROOM CULTIVATION)**  
**SKILL ENHANCEMENT COURSE (SEC)**

**CMC620S: COMMERCIAL MUSHROOM CULTIVATION–III: POST HARVEST MANAGEMENT AND MARKETING**

**CREDITS: THEORY: 2, PRACTICAL: 2**  
**MAX MARKS: THEORY: 30, PRACTICAL: 30**  
**MIN MARKS: THEORY: 12, PRACTICAL: 12**

**Objective:** *To develop understanding about the scope of growing economically and industrially important mushrooms for marketing and processing*

**THEORY (2 CREDITS)**

**UNIT I**

Commercial Mushroom Cultivation: Present scenario and prospects for mushroom cultivation; description of edible types, natural growth aspects and climatic requirements; economically and industrially important mushrooms

National and Global Scenario of Mushroom market, harvesting, grading, processing, packaging, storing and value addition of mushroom, Preparation of different mushroom products (Pickle, Sweets, Snacks, fast food, namkeen), branding & marketing of mushroom and its products

**UNIT II**

Design, construction and establishment of mushroom farm, components of a mushroom unit, business module of mushrooms, low tech and high-tech mushroom farming, setting a seasonal mushroom unit, low cost mushroom unit

Cost economics of mushroom culture, economics of cultivation, economics of spawn and compost production, and mushroom recipes

**PRACTICALS (2 CREDITS)**

- Preparation of different recipes and mushroom products (Pickle, Sweets, Snacks, fast food, namkeen),
- Branding, and marketing of mushrooms.
- Components of a mushroom unit.
- Visit to low-tech and hi-tech mushroom farms.
- Use of spent mushroom in vermi-composting and inorganic farming.
- Machinery required for composting and for spawn lab.

**Suggested Readings**

1. Biswas, S. Datta, M. and Nsgachi, S. (2012). Mushroom, A manual of cultivation. Ashk K. Ghosh, PHI Learning, Pvt., New Delhi.
2. Chang S.T. and Miles, P.G. 2004. Mushrooms: Cultivation, Nutritional Values, Medical Effects and Environmental Impact. Second edition, CRC Press (www.crcpress.com) ISBN 49310431.
3. Hall, I. et al. 2003. Edible and poisonous mushrooms of the world. Institute for Crop and Food Research, New Zealand. ISBN 0-478- 10835-4. 370.
4. Jean Mara-Polese. 2005. Pocket guide to mushrooms. Tandem Verloag GmH (Konemann).
5. MushWorld (www.mushworld.com) Obtainable from Mushworld. 2004. Mushroom Growers' Handbook 1: Oyster Mushroom Cultivation.
6. Oei, P., and van Nieuwenhuijzen, B. de Feijter, J. 2005. Small-scale mushroom Cultivation of oyster, shiitake and wood ear mushrooms. The Netherlands. ISBN, Agromisa Foundation and CTA: 90-8573-038-4.
7. Peng, J.T, et al. 1990. The atlas of cultivated Pleurotus mushrooms. ISBN 957-9055-03-3.
8. Phillips, R. 2006. Mushrooms. Pub. McMilan, ISBN 0-330-44237-6. P. 266.